CITY OF ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS



Department of Public Works Transportation Division 1802 Courtland Road Roanoke, Virginia 24012

Revised July 1, 2013



City of Roanoke Right of Way Excavation and Restoration Standards Revised July 1, 2013

PRELIMINARY STATEMENT

- A. The purpose of these Right of Way Excavation and Restoration Standards (Standards) is to establish standards and guidelines governing excavations and restorations within the public Right of Way of the City of Roanoke, Virginia. The intent of these Standards is to preserve and extend the service life of the public infrastructure and to prevent pavement failures and settlement resulting from excavations. The City's objective is to ensure the integrity of its street infrastructure, provide for the public safety, and minimize inconvenience to the traveling public. These Standards are necessary for the benefit, safety and general welfare of the public.
- B. The City of Roanoke acknowledges the need and obligation to accommodate utilities in the public Right of Way. It is expected that utilities and private contractors understand the primary purpose of public roadways and walkways is to provide for the safe and efficient travel of the public. This purpose has precedence over any secondary use of the Right of Way.
- C. Under these Standards, a comprehensive permit process is created to regulate excavations in the public Right of Way by public utilities, private contractors or any person.
- D. Compliance with these Standards is intended to minimize the impact of construction on residents and businesses by enforcing cleanliness and safety standards for construction sites, imposing strict timelines for construction, and requiring a durable restoration of the Right of Way with a uniform visual appearance and good ride quality.
- E. These Standards detail a process for reviewing, denying, approving and conditionally approving permits.
- F. These Standards provide for the establishment of regulations for the control of excavation sites that include protection of trenches and excavated material, prompt removal of excavated materials, and procedures for the treatment and remediation of hazardous material found in the public Right of Way.
- G. Prompt restoration of the public Right of Way is an essential element of these Standards and will be strictly enforced.
- H. All work within the public Right of Way shall be coordinated through the Transportation Division, which is responsible for permitting and coordinating excavations and utility cuts.
- I. The City of Roanoke shall comply with these Standards.



K. These Standards will apply to permits issued on and after the effective date of these Standards, which is July 1, 2013.

APPROVAL OF RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS BY CITY MANAGER

Pursuant to the authority granted to me by the Roanoke City Code Section 30-49, I hereby approve and adopt this Revision, dated July 1, 2013, of the City of Roanoke Right of Way Excavation and Restoration Standards, and I further designate the Transportation Division Manager as my agent for the purposes of implementing and administering these Standards.

Christopher P. Morrill

City Manager



Phone Numbers

Transportation Division Inspector's Office	540-853-2676
Permit Center	540-853-1090
Landscape Coordinator	540-853-5837
Miss Utility of Virginia	811
Office of the City Engineer	540-853-2731
Transportation Division.	540-853-2676
Transportation Division - Fax Number	540-853-1270
Office of Environmental Administrator	540-853-1173
Police Non-Emergency Number	540-853-2411
Traffic Engineering	540-853-2676
Urban Forester	540-853-1994



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1. GENERAL PROVISIONS.

1.1 EXCAVATION IN THE PUBLIC RIGHT OF WAY.

The City of Roanoke Charter, Section 2 (12), grants the City the power to regulate Right of Way use. The City Code, Chapter 30, Streets and Sidewalks, Article III, Street Excavations, grants the City Manager the authority to supervise and control the restoration of the Right of Way to its original condition. This authority has been delegated by the City Manager to the Transportation Division Manager.

1.2 PERMITS REQUIRED TO EXCAVATE.

- (a) In accordance with City Code Section 30-60, it is unlawful for any Person to make any excavation in any Public Right of Way unless a permit to do so has been obtained, except for routine maintenance and repair of street surfaces and manhole adjustments performed by or on behalf of the City. Permit requirements pertaining to an emergency excavation are addressed in Section 3.6 of these Standards.
- (b) In accordance with City Code Section 30-61, any Person desiring a permit shall complete an application for such permit.
- (c) The Transportation Division shall issue a permit to excavate only if the Applicant has the legal authority to occupy and use the Public Right of Way for the purposes identified in the application for the permit.

1.3 ORDINANCES AND REGULATIONS.

In addition to the requirements set forth in these Standards, the City may adopt such ordinances, resolutions, regulations, or policies, as it deems necessary in order to preserve and maintain the public health, safety, welfare, and convenience. Each excavation in the Public Right of Way pursuant to these Standards shall be performed in accordance with the following:

- (a) The applicable sections of Chapter 30, <u>Streets and Sidewalks</u>, Code of the City of Roanoke (1979), as amended.
- (b) The latest edition and applicable sections of the Virginia Department of Transportation Road and Bridge Specifications and Standards.
- (c) The latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- (d) The latest edition of the Virginia Work Area Protection Manual.



(e) The Virginia Underground Utility Damage Prevention Act, Virginia Code Sections 56-265.14, et seq.

1.4 **DEFINITIONS**.

For purpose of these Standards, the following terms shall have the following meanings:

- (a) "Applicant" shall mean any Owner, Person, company, or entity who has submitted an application for a permit to excavate or make an opening in any City Right of Way.
- (b) "Block" shall mean that part of the Public Right of Way that includes the street area from the property line to the parallel and/or opposite property line in width and extending from the centerline of an intersecting street to the nearest property line or to the centerline of the next intersecting street in length.
- (c) "City" shall mean the City of Roanoke, Virginia.
- (d) "Division" shall mean the Transportation Division of the Department of Public Works.
- (e) "**Deposit**" shall mean any bond, cash deposit, or other security provided by the Applicant in accordance with its permit, franchise, or other agreement with the City.
- (f) "Emergency Excavation" shall mean any work in the surface or subsurface of the Public Right of Way immediately necessary for the preservation of life or property and for which there is not sufficient time to obtain a permit.
- "Excavation" shall mean any work in the surface or subsurface of the Public Right of Way, including, but not limited to, opening the Public Right of Way; installing, servicing, repairing or modifying any Facility (ies) in or under the surface or subsurface of the Public Right of Way; and restoring the surface and subsurface of the Public Right of Way.
- (h) "Facility" or "Facilities" shall include but not be limited to, any and all cables, cabinets, ducts, conduits, converters, equipment, drains, handholes, manholes, pipes, storm sewers, pedestals, valve boxes, splice boxes, surface location markers, tracks, tunnels, utilities, vaults and other appurtenances or tangible things owned, leased, operated, or licensed by any entity that are located or are proposed to be located in the Public Right of Way.
- (i) "Inspector" shall mean Transportation Division Inspector.
- (j) "Owner" shall mean any Person, including the City, who owns any Facility or Facilities that are or are proposed to be installed or maintained in the Public Right of Way.



- (k) "Permit Administrator" shall mean the person to whom the Transportation Division Inspector reports.
- (l) "Permittee" shall mean the Applicant to whom a permit to excavate, or otherwise work in the public Right of Way, has been granted by the Department of Public Works, Transportation Division.
- (m) "Person" shall mean any individual, firm, owner, sole proprietorship, partnership, corporation, unincorporated association, governmental body, Commonwealth of Virginia, Federal Government, authority, commission, municipal corporation, executor, administrator, trustee, guardian, agent, occupant, or other legal entity.
- (n) "Public Utility" shall mean any Person or Owner whose Facility or Facilities in the Public Right of Way are used to provide electricity, natural gas, information services, sewer services, water services, telecommunications, cable television, video, or any other services to customers regardless of whether such Person or Owner is deemed a public service corporation by the Virginia State Corporation Commission.
- (o) "Public Right of Way" or "Right of Way" shall mean the area across, along, beneath, in, on, over, under, upon, and within the dedicated public alleys, boulevards, courts, lanes, roads, sidewalk, spaces, streets, and ways which are or will be under the permitting jurisdiction of the Department of Public Works.
- (p) "Quality Control Plan" shall mean a written Plan that is prepared by a Person or Permittee who performs or expects to perform Excavations under or subject to these Standards; and such Plan shall be submitted to and approved by the Transportation Division Inspector before the Plan can be used. The Plan shall only provide for alternate methods to the following: backfill material type, method of initial repair (including matching existing pavement cross-section and type), and frequency of density and moisture testing performed and certified by a VDOT-certified technician or geotechnical engineer. The Plan shall document actual field testing that demonstrates that the alternate methods meet or exceed the quality of the repair or restoration required by these Standards.
- (q) "Standard" or "Standards" shall mean the City of Roanoke Right of Way Excavation and Restoration Standards current revision.
- (r) "Stop Work Order" shall mean an order issued by the Transportation Division Inspector describing a violation and directing the Person doing the work in the City Right of Way to stop such work as directed by such order. When the Transportation Division Inspector has



determined that a Person or Permittee has violated the provisions of these Standards or that an Excavation poses a hazardous situation or constitutes a public nuisance, public emergency, or other threat to the public health, safety, or welfare, the Transportation Division Inspector is authorized to issue a Stop Work Order, to impose new conditions on a permit, or to suspend or revoke a permit by notifying the person or Permittee of such action in a written, electronic, or facsimile communication.

1.5 APPLICABILITY OF REVISED STANDARDS.

This revision of the City of Roanoke Right of Way Excavation and Restoration Standards will apply to all permit applications approved on or after July 1, 2013. For any permit applications approved prior to July 1, 2013, the Right of Way Excavation and Restoration Standards - second revision shall continue to apply to such permits for the duration of such permits. Provided, however, a Permittee may request in writing, addressed to the Permit Administrator, that its current permit be allowed to be completed under the provisions of these revised Standards and that Permittee agrees to comply with and be bound by such Standards. The decision to grant or deny such request shall be made by the Permit Administrator based on a review of the request and taking into consideration how much time remains to complete the current permit, coordination of the current permit work with other projects in the area, the Permittee's past and current performance under the existing Standards, and/or such other items as the Permit Administrator determines to be relevant to the request.

2. APPLICATIONS FOR PERMITS TO PERFORM AN EXCAVATION.

2.1 APPLICATIONS.

Applications shall be submitted to the Permit Center, located in the Department of Planning, Building and Development on the basement floor of the Noel C. Taylor Municipal Building, Room 170, 215 Church Avenue, SW, Roanoke, Virginia. Applications shall be submitted on the form contained in Attachment 2 in duplicate and shall contain:

(a) The name, address, telephone, and facsimile number of the Applicant. When an Applicant is not the Owner of the Facility to be installed, maintained, or repaired in the Public Right of Way the application also shall include the name of the Owner.



- (b) A description of the proposed excavation including location (address and nearest tax map number,), purpose, method of Excavation, and surface and subsurface area of the proposed Excavation.]
- (c) A scaled site plan showing the proposed location, dimensions of the Excavation, the nearest cross street, the Right of Way property line, a North arrow, other underground or overhead facilities in the vicinity of the proposed Excavation, trees and landscaping, and the facilities to be installed, maintained, or repaired in connection with the Excavation, and any other details as the Division may require.
- (d) The proposed duration of the Excavation, which shall include the duration of the restoration of the Public Right of Way physically disturbed by the Excavation.
- (e) A detailed traffic control plan if required by the Division.
- (f) Any proposed attachments to bridges will require the submittal of a detailed plan and specifications with the permit application for approval by the City of Roanoke.
- (g) A valid original signature of the Applicant acknowledging the terms and conditions of these Standards and permit application.
- (h) Applicable permit fee(s) by cash, check or money order made payable to the City of Roanoke. The amount of such permit fees shall be as set forth in the City's Fee Compendium.
- (i) Proof of insurance coverage required in Section 2.2 below.
- (j) Any other information that may reasonably be required by the Division.

2.2 INSURANCE.

The Permittee shall, at its sole expense, obtain and maintain during the life of such permit and warranty period, the insurance policies required by this Section, unless otherwise provided for in an existing franchise or other agreement with the City, or in writing by the Transportation Division. Any required insurance policies shall be effective prior to the beginning of any work or other performance by the Permittee under this Contract. Permittee shall assure that all subpermittees have secured and maintained the coverages described herein. Permittee's insurance shall not have exclusions for sub-permittees. However, a Permittee may provide evidence of self-insured coverage in place of such insurance policies if such self insurance coverage is approved in writing by the City's Risk Manager. Furthermore, such policies and coverages shall be allowed to be used for work done by Permittee under any permits issued pursuant to these Standards, unless



additional policies and coverage are required by the Permit Administrator. The following minimum policies and coverages are required:

- (a) The following minimum insurance requirements apply:
 - 1) Workers' Compensation and Employers' Liability:

The Permittee shall obtain and maintain the following limits:

Workers' Compensation: Statutory

Employers' Liability: \$100,000 bodily injury by accident each occurrence

\$500,000 bodily injury by disease (policy limit) \$100,000 bodily injury by disease each employee

2) Commercial General Liability:

Coverage is to be written on an "occurrence" basis, \$1,000,000 minimum limit, and such coverage shall include:

- Products/Completed Operations
- Contractual Liability
- Broad Form Property Damage
- Protective Liability for Operations of Sub-Permittees (if any)
- Personal Injury and Advertising Injury
- Bodily Injury

DELETE X, C, and U Exclusions

3) Automobile Liability to be written on an "occurrence basis":

Limits for vehicles owned, non owned or hired shall not be less than:

- \$1,000,000 Bodily Injury and Property Damage combined single limit
- 4) Environmental Impairment Liability: If applicable, as determined by the City:
 - \$1,000,000 per occurrence
- (b) Proof of Insurance Coverage: The policies of insurance shall be purchased from a reputable insurer licensed to do business in Virginia and maintained for the life of all work to be done by the Permittee. Other insurance requirements include the following:
 - 1) The Permittee shall furnish the City with the permit application, together with the required certificates of insurance showing the insurer, type of insurance, policy



- number, policy term, and limits, or evidence of acceptable self insurance. Such documents shall be provided to the City before any permit will be issued and before any work is done, except as otherwise provided in these Standards.
- 2) The required certificates of insurance shall name the City of Roanoke, its officers, agents, volunteers, and employees as additional insureds except with regard to Workers' Compensation and employers' liability coverages. Workers' Compensation and Employer's Liability coverages shall contain a waiver of subrogation in favor of the City. Additional insured and waiver endorsements shall be received by the City Risk Manager from the insurer within 30 days from the date of the permit application.
- 3) Such certificates of insurance or evidence of self insurance may be submitted by a Permittee to the City with a request that they be valid for a period of one (1) year to cover all permitted work to be done by the Permittee for such time period. If the Transportation Division approves such request, separate certificates of insurance or evidence of self insurance will not need to be provided to the City during that period of time. Provided, however, the City Risk Manager may require at any time increased amounts of coverages or separate insurance certificates of insurance or evidence of self insurance from the Permittee if such officer determines such action is needed to protect the interest of the City.
- 4) Such insurance coverage amounts may be provided by an excess insurance policy following the form of the underlying coverages.

2.3 PERMIT SECURITY.

Unless otherwise provided for in a franchise or other agreement with the City or by law, a permit security shall be required for all permits issued and the amount of such permit security shall be set by the Division at the time of the permit application. The amount of the permit security will be equal to the estimated value of the work within the right of way; however the minimum permit security will be not less than \$5,000. A permit security shall consist of one of the following:



- (a) Letter of credit approved by the City's Director of Finance;
- (b) Excavation permit bond with corporate surety in substantially the form set forth in Attachment 3 to these Standards;
- (c) Cash; or
- (d) Certified check made payable to the City.

Such permit security may be submitted by a Permittee to the City with a request that such security be valid for a period of two (2) years to cover all permitted work to be done by the Permittee for such time period. If the Transportation Division approves such request, separate permit securities will not need to be provided to the City during that period of time. Provided, however, the City Risk Manager may require at any time increased amounts for such permit security or separate permit securities from the Permittee if such officer determines such action is needed to protect the interests of the City.

2.4 PURPOSE AND DURATION OF PERMIT SECURITY.

- (a) A permit security in the approved amount shall be provided to the Permit Center and approved by the City Attorney and Director of Public Works before any permit will be reviewed. The permit security is to guarantee that the work performed by the Permittee under the permit is done in compliance with these Standards, including the warranty provisions of Section 6.2. Such permit security shall be kept in effect for the term of the permit, any extension thereto, and for any warranty periods.
- (b) Such permit security may be allowed to be used for work done by Permittee under any permits issued pursuant to these Standards, provided that the Permit Administrator may require the amount of any such permit security to be increased to provide protection to the City for the anticipated amount of all work to be done by the Permittee.
- (c) Return of Permit Security. Upon completion of all of the work covered under all applicable permits, the expiration of any applicable warranty period, and acceptance of the work after a warranty inspection, the permit security will be returned to the Permittee within thirty (30) days after a written request from the Permittee.



3. PERMITS TO PERFORM EXCAVATION.

3.1 MAKING AN EXCAVATION IN THE RIGHT OF WAY WITHOUT A PERMIT.

No person shall make an Excavation in the Right-of-Way without a permit except as may be permitted by these Standards, the City Code, or by law. Any Person doing so will be subject to appropriate penalties and/or fees as provided for in these Standards, the City Code, or by law and shall obtain a permit as soon as possible. Also, any such Person making any such unpermitted Excavation may be required to remove any items placed in the Right-of-Way and to restore the Right-of-Way to its original condition before such Excavation was done or to pay all costs and expenses to have this done. Furthermore, the failure of a person to have a valid permit to make an Excavation shall not relieve such person from complying with all the requirements of these Standards as to any such Excavation, including, but not limited to all obligations to restore, repair, and replace the Right-of-Way to its original condition and all warranties for such work.

3.2 ACTION ON APPLICATIONS FOR PERMITS TO EXCAVATE.

- (a) The Applicant shall submit a properly completed application to the Permit Center, together with the required site plan, for processing.
- (b) The Permit Center will forward the application to the Transportation Division, which shall approve, conditionally approve, or deny the application.
- (c) If the application is approved or conditionally approved, the application will be forwarded to the Permit Center for processing and issuance of a permit to be signed by the Permit Administrator.
- (d) If the application is denied, the Division shall advise the Applicant in a written, electronic, or facsimile communication of the basis for denial.
- (e) It is anticipated that the duration of the process will take ten (10) business days.



3.3 TERMS AND LIMITATIONS.

The permit shall specify the location, extent, and method of the Excavation, the start date and duration of the Excavation, the Permittee to whom the permit is issued, and any conditions placed on the permit.

3.4 EXPIRATION OF PERMIT.

Normal duration of a permit is thirty (30) days. Additional time will be considered upon request. If the Excavation, including restoration, has not been completed within the time specified in the permit, the Transportation Division may issue a "Stop Work Order," and/or withhold future permits or cause such work to be completed by other contractors at the Permittee's sole expense; provided, however, that the Transportation Division may issue extensions to the start date, or time of completion, or both, upon written request from the Permittee stating the reasons for the extension.

3.5 NON-TRANSFERABILITY OF PERMITS.

Permits are not transferable.

3.6 EMERGENCY EXCAVATION.

Nothing contained in these Standards shall be construed to prevent any Person from taking any action necessary for the preservation of life or property when such necessity arises anytime when the Division is closed (Section 30-60, Code of the City of Roanoke (1979), as amended). In the event that any Person takes any action to excavate or cause to be excavated the Public Right of Way pursuant to this Section; such Person shall apply for an emergency permit within four hours after the Division's offices are first opened. The Applicant for an emergency permit shall submit a written statement of the basis of the emergency action and describe the Excavation performed and any work remaining to be performed. All aspects of these Standards shall apply.

3.7 LIABILITY OF PERMITTEE.

Each Permittee is wholly responsible for the quality of the Excavation performed in the Public Right of Way and is liable for all consequences of any such Excavation and any Facilities installed in the Public Right of Way. Permittee is responsible for any acts or omissions of



Permittee's employees, agents, or subcontractors. Permittee agrees and binds itself to indemnify, keep and hold the City, its officers, agents, and employees (hereafter collectively referred to in this paragraph as City) free and harmless from any and all claims, causes of action, damages or any liability, including reasonable attorney's fees and costs, on account of any injury or damage of any type to any persons or property (including City property) growing out of, or directly or indirectly resulting from, any act or omission of Permittee or Permittee's employees, agents, or subcontractors, including but not limited to: (a) Permittee's use of the public ways or other areas of the City; (b) the acquisition, construction, reconstruction, erection, installation, operation, maintenance, repair or extension of Permittee's facilities within the Public Right of Way; (c) the failure, refusal or neglect of Permittee to perform any duty imposed upon or assumed by Permittee by or under its permit. The issuance of any permit, inspection, repair, or suggestion, approval or acquiescence of any person affiliated with the Division shall not excuse the Permittee from such responsibility or liability.

3.8 PERMIT TO BE AVAILABLE AT EXCAVATION SITE.

The permit or a photo duplicate or such other document approved by the Permit Administrator shall be available for review at the site of the Excavation for the duration of the Excavation and shall be shown, upon request, to any police officer or any other employee of a City agency or department with jurisdictional responsibility over activities in the Public Right of Way. Failure to have a valid copy of any required permits on-site may cause a "Stop Work Order" to be issued. Any and all additional costs incurred by the Permittee, as result of the issuance of a "Stop Work Order," shall be the Permittee's responsibility.

3.9 FEES AND DEPOSITS.

Permittee shall remit to the City the applicable fees and deposits as required by the applicable sections of the Roanoke City Code and as adopted by City Council and set out in the Fee Compendium, and these Standards. Contact the Permit Center for current permit fee(s) and deposit information.



3.10 FAST TRACK PERMITS.

Fast-track permits are pre-approved permit numbers that allow a public utility with Facilities in the Right of Way to submit permit applications via e-mail. Only emergency work, installation of a new utility service connection, and minor routine maintenance activities or repairs will be permitted by this method.

If requested in writing, the Transportation Division will issue a pre-approved block of permit numbers to each Applicant. No Applicant will be issued more than one block of numbers at a time. The Transportation Division will determine the total number of permits per block. No entity shall have more than two (2) active blocks of permit numbers open at any given time. A third block of numbers will not be issued until the entity has used all of the numbers in the first block. Each Public Utility desiring to use this process shall designate a contact person responsible for the security and issuance of pre-approved fast-track permit numbers. The participating entities will be invoiced monthly for each block of permit numbers issued the previous month. Payment shall be remitted promptly within thirty (30) days of receiving the invoice.

3.11 ON DEMAND PERMITS.

On Demand permits are pre-approved permits that allow the property owner of record (as listed in the Clerk's Office of the Circuit Court where the property is located) or Building Permit Holder to obtain a permit based on the approval of a Development Plan by the City of Roanoke Department of Planning, Building and Development. Each Applicant shall show proof of insurance coverage required in Section 2.2 and shall provide a permit security required in Section 2.3 in order to receive a permit by this method. Only the scope of work detailed in the approved Development Plan shall be performed under this permit. If field conditions warrant a change in the work, the proposed change shall be approved by the Department of Planning, Building and Development and the Transportation Division before work can proceed. With the exception of the Western Virginia Water Authority, work performed by or on behalf of Public Utilities when modifying or extending their Facilities to the point of service connection shall not be permitted by this method. Permits will be issued for a duration of 30 days. Any permit required for a period longer than 30 days shall be requested in writing prior to application for an On Demand Permit.



The Development Review Coordinator of such Department will review such request. All work required by an On Demand Permit issued pursuant to this Section shall be completed and approved by the Transportation Division before any Certificate of Occupancy will be issued.

4. EXCAVATIONS.

4.1 NOTICES.

Any Permittee who makes an Excavation in the Public Right of Way shall provide notice, except in an emergency, as follows:

- (a) At least one week prior to commencement of work requiring lane closures, notify Traffic Engineering.
- (b) At least forty-eight (48) hours prior to the commencement of work, the Permittee shall notify the Inspector's Office by faxing or delivering a completed Work Location Sheet included in these Standards as Attachment 4. Failure to notify within the prescribed time may result in the issuance of a "Stop Work Order" by the Transportation Division. Any and all additional costs incurred by the Permittee, as a result of the issuance of a "Stop Work Order," shall be the Permittee's responsibility.
- (c) Notice for Emergency Excavation. The Permittee or Applicant shall notify, as soon as possible, the Division, or if after normal business hours, the Police non-emergency number and advise of the Emergency Excavation and any potential impacts on traffic flow or traffic or pedestrian safety.

4.2 NOTICE FOR MARKING OF SUBSURFACE FACILITIES.

In accordance with State law, Virginia Code Section 56-265.14, et seq., any Person excavating in the Public Right of Way shall comply with the requirements of the Virginia "Underground Utility Damage Prevention Act" regarding notification of Excavation and marking of subsurface Facilities.

4.3 LIMITS UPON EXCAVATION IN THE PUBLIC RIGHT OF WAY.

(a) <u>Scope</u>. A Permittee shall not make, cause, or permit to be made, any Excavation in the Public Right of Way outside the boundaries, times, and description set forth in the permit or the plans filed.



- (b) <u>Single Excavation maximum of 500 linear feet</u>. No single open Excavation site shall be longer than 500 feet in length at any time.
- (c) No work will be permitted (except for emergencies) on certain streets during special City events, or other events so designated by Traffic Engineering.

4.4 REGULATIONS CONCERNING EXCAVATION SITES.

Each Owner and Permittee shall be subject to requirements for Excavation sites that are set forth herein and shall include, but not be limited to, the following measures:

- (a) Protection of the Excavation. Whenever possible, Excavations should be backfilled immediately following the work. Each Permittee shall cover an open Excavation with properly designed and load rated steel plates ramped to the elevation of the contiguous street, pavement, or other Public Right of Way, or otherwise protected in accordance with guidelines prescribed by the Division. If used, steel plates shall conform to the requirements of the "Steel Plate Conspicuity and Warning" section of the Virginia Work Area Protection Manual. Steel plates shall include durable, highly reflective white pavement marking tape on each corner. Steel plates shall be secured so that they do not slip, shall provide a skid resistant travel surface (with the use of an industrial coating or other approved method), and shall not deflect from traffic loads. Steel plates shall extend at least one foot on all sides of the Excavation and shall be firmly anchored with pins. A "STEEL PLATE AHEAD" sign shall be placed in advance of the temporary steel plate to warn approaching motoriess of the changed roadway condition.
- (b) Housekeeping and removal of excavated material. Each Permittee shall keep the area surrounding the Excavation clean and free of loose dirt or other debris in a manner deemed satisfactory to the Division. In addition, the Permittee shall remove all excavated material from the site of the Excavation no later than the end of each workday. All excavated material shall be disposed of at a fill site pursuant to an erosion and sediment control plan approved by the City of Roanoke if such site is located in the City. If the site is outside the City, the plan shall be approved by the jurisdiction where the site is located.



- (c) <u>Hazardous materials or wastes</u>. Each Permittee shall comply with applicable federal, state, and local laws and regulations regarding hazardous materials and/or wastes as such laws and regulations may apply to the Permittee's activities.
- (d) Traffic Control. All traffic control devices and provisions around construction sites shall be installed and maintained in accordance with the latest editions of the "Manual on Uniform Traffic Control Devices" (MUTCD) and the "Virginia Work Area Protection Manual," subject to modification for specific locations by the Transportation Division. The Permittee is responsible for furnishing, installing, and maintaining all traffic control devices, including but not limited to signs, barricades, lights and other appurtenances, 24-hours a day, seven (7) days a week, and for removal of such signs as required by these Standards. The individual(s) responsible for placement and maintenance of the work zone shall have completed VDOT's Basic Work Zone Safety Training and any flaggers, if required, shall maintain VDOT Flagger Certification. Such individuals shall have their certification cards with them at all times while at the work zone.
- (e) Erosion and Sediment Control. Erosion and sediment control around work sites shall be in accordance with the "Virginia State Erosion & Sediment Control Handbook" (current edition) and the Roanoke City Code. Inlet protection should be provided at inlets and yard drains. Under no circumstances shall material be allowed to enter the storm drain system. Excess material/sediment shall be allowed to dry and then removed by vacuum sweeper or shoveling and hauled away. Street washing shall be allowed only after sediment is removed in this manner. Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not adversely affect adjacent property.
- (f) <u>Job-site parking</u>. No job-site parking on sidewalks or landscaping is permitted. Parked vehicles and equipment shall not restrict private property access nor hinder sight distances for traffic.
- (g) <u>Pedestrian Access.</u> The Permittee shall provide pedestrian access to abutting properties or the Public Right of Way in a safe manner. Protective barricades, fencing, handrails and



bridges, together with warning guidance devices and signs shall be utilized so that the passageway for pedestrians is safe and well defined. Installation of a fixed pedestrian walkway of the fence-and-canopy type to protect and control pedestrians is also required where hazardous work conditions exist overhead. The walk area shall comply with OSHA standards, local Building Codes, Americans With Disabilities Act Guidelines, and any additional requirements set forth by the Division.

- Walkways in construction areas shall be maintained at least four (4) feet in width and free from abrupt changes in grade. (Maximum allowable grade is 1" rise in 12" of run.) Obstructions within the walkway shall be illuminated during hours of darkness. Minimum vertical clearance to any obstruction within the walkway shall be at least seven feet.
- Where sidewalks are closed or damaged by construction, an alternate walkway shall be provided pursuant to a Traffic Control Plan approved by Traffic Engineering. Otherwise, at no time shall pedestrians be diverted into a portion of the street, including the parking lane, used for vehicular traffic. This includes and prohibits the closure of a sidewalk mid-block, unless a properly signed and marked temporary (mid-block) crosswalk has been approved by Traffic Engineering or as may otherwise be provided by the approved Traffic Control Plan.
- 3) At locations where alternate walkways cannot be provided, appropriate signs and barricades shall be installed at the nearest crosswalk or intersection to divert pedestrians across the street. The Permittee shall submit a special plan on the pedestrian route and signage for this type of closure.
- (h) Temporary Asphalt Repair: A temporary asphalt repair shall be applied over a backfilled Excavation before the lane containing the Excavation is opened to traffic. The patch shall be a minimum of 2 inches thick, level with the surrounding pavement, and of sufficient quality to carry the traffic loading of the street without sinking, displacement or breaking apart. In a street without striping, alternatives to a temporary asphalt repair may be considered for periods of less than 48 hours. It shall be the responsibility of the Permittee to maintain the temporary repair in a condition satisfactory to the Inspector until the permanent repair is in place.



4.5 WORK OUTSIDE THE PAVEMENT.

- (a) All work areas outside the pavement shall be restored to a condition equal to or better than the condition that existed prior to the work. All pits/trenches remaining open overnight shall be barricaded or fenced on all sides to ensure pedestrian and motorist safety.
- (b) When the work area is interrupted in excess of one week, temporary repairs (select fill to grade) shall be made. No work area outside of the pavement will be left in a disturbed condition over ten (10) days. When the Permittee is notified of a failure in the work area (i.e. cave-in, work zone protection altered), the Permittee shall respond and repair the work area within 24 hours.
- (c) The City reserves the right to make or have made any and all required repairs, and recover all associated costs from the Permittee, where necessitated by emergency conditions.

4.6 QUALITY ASSURANCE/QUALITY CONTROL INSPECTION.

The inspection process is the primary method by which the Division seeks to protect the City's investment in its Public Right of Way infrastructure. A uniform and responsive inspection process will ensure that the work is completed in accordance with the standards for reconstruction and site restoration specified and referenced herein. The Division's inspection effort will also ensure that the City's infrastructure attains its maximum useful life and utility restoration callbacks are minimized.

- (a) The Division's quality assurance efforts complement the Permittee's quality control efforts. Quality assurance begins with the site plan review process. City Inspectors are responsible for the inspection of all permitted work within the Public Right of Way. The inspector serves as liaison with Permittee to advise on construction standards and practices and to coordinate activities between the City and other entities and to advise on the extent of restoration.
- (b) Quality control is the responsibility of the Permittee. The Permittee is expected to be familiar with the applicable standards referenced herein and to employ qualified and licensed personnel and/or subcontractors that will utilize these standards in the restoration of the Public Right of Way. Permittees and their subcontractors who fail to comply with



- these standards risk denial of permits for performing future work in the Public Right of Way.
- (c) Inspection services will be provided by the Division as necessary, and upon a request by the Permittee or its subcontractors. The Permittee shall notify the Inspector at least forty-eight (48) hours before beginning the work. Right of Way permit inspections shall be scheduled by calling the Building Division's inspection line at 853-1142. A Transportation Division inspector will return the call to schedule a mutually agreeable inspection time.
- (d) The City's Inspector will be focused on restoration of the Public Right of Way including, but not limited to, backfill, compaction, hazard protection, repaving, shoulders, landscaping, and traffic control. Some inspections will be ongoing throughout the duration of a Permit, whereas other inspections will be made only after completion of the work. Factors that will be considered for ongoing inspections include location of work, duration of work, size of area being disturbed or other issues as determined by the Division.

4.7 DAMAGE TO ITEMS IN THE RIGHT OF WAY OR TO THE RIGHT OF WAY.

- (a) For all Excavations, the Permittee shall thoroughly investigate the location of all known public, municipal, or any other utilities or other Facilities paralleling or crossing the proposed path of the proposed Facilities or construction area.
- (b) The Permittee shall be responsible for all damages of any type caused to items in the Right of Way or to the Right of Way as a result of performing the work covered under the Permit or in the Right of Way, unless otherwise provided by law or in these Standards. All damages shall be repaired in accordance with Section 5 of these Standards and shall be subject to the warranty period described in Section 6.2 of these Standards.

5. RESTORATION STANDARDS FOR THE PUBLIC RIGHT OF WAY.

Each Permittee that excavates or is responsible for an Excavation in the Public Right of Way shall be responsible for maintaining, repairing, and/ or restoring the site of the Excavation equal to or better than its former condition (Section 30–48, Code of the City of Roanoke (1979), as amended). The following standards will serve as guidelines for work in the City of Roanoke:



5.1 ASPHALT PAVEMENT.

Pavement restoration shall match the existing street cross section and pavement type unless otherwise provided for in a Quality Control Plan approved by the Transportation Division. The limits of restoration required to any pavement type shall be dependent on the size of the Excavation, and whether it is listed on the three-year paving program candidate list. If the Excavation is located on a street listed on the three-year paving program candidate list, final restoration (mill and re-pave) will not be required. Any variance of the limits of restoration required is at the discretion of the Permit Administrator. In all cases the work site shall be cleaned up each day.

(a) Backfilling and Compaction:

- Backfill material shall be VDOT No. 21A Aggregate, placed in loose lifts not exceeding 6", and compacted to at least 95% maximum dry density within 2 percentage points of optimum moisture (VTM-1) with the use of mechanical tampers or vibratory rollers. Water compaction is not permitted. Local material classified as Type I select material may be used as backfill upon prior approval by the Transportation Division. Material classification shall be performed on the local material to verify that the material meets VDOT specifications for Type I select material by a qualified testing laboratory and test results shall be certified by a Virginia Registered Professional Engineer. Density requirements are the same as above, however, moisture content for soils may be within 20% of optimum.
- Density and moisture testing is required on both aggregate and soil backfill. All testing shall be performed and certified by a geotechnical engineer or a VDOT Certified Technician. Results shall be provided to the Inspector within 24-hours of testing completion. The cost of all testing is the sole responsibility of the Permittee. The Permittee shall submit written test results to the Inspector's Office.
- 3) Field density testing methods shall be approved by the Transportation Division prior to performing any testing. A Permittee that performs more than ten (10) Excavations a month under these Standards may submit a written quality control plan to reduce the number of required field density tests. The quality control



- plan shall include the exclusive use of a VDOT-certified aggregate. The quality control plan shall be submitted to the Transportation Division for review and approval.
- 4) The City reserves the right to perform density testing on its own. Should deficiencies be noted through this testing, any corrective actions required shall be performed at no cost to the City.
- Flowable fill may be used as an alternate to Aggregate or Select material. Flowable fill shall meet the requirements of VDOT special provisions for flowable backfill. The material shall be plant-certified to provide a 28-day compressive strength between 30 and 200 psi. A certificate of mix design shall be submitted to the Inspector prior to placing the material in the trench. A minimum of four 6 x 12 test cylinders shall be taken every 50 CY of placement. Cylinders shall be tested by a qualified testing laboratory for 28-day strength. Results shall be provided to the Inspector's Office within 24 hours of testing completion. The cost of all testing is the responsibility of the Permittee. If the report indicates the compressive strengths are not between 30 and 200 psi, the Permittee will be responsible for removing and replacing the backfill with acceptable backfill and completing the restoration of the street at no cost to the City.

(b) Initial Pavement Repair:

- 1) The following repair is required, unless another method has been approved as part of an Applicant's Quality Control Plan. After backfill to subgrade is complete, saw cut pavement surface at least one (1) foot beyond all sides of the excavated trench.
- 2) Remove existing pavement surface, exposing a minimum of one-foot wide undisturbed bench on top of the base.
- Ompact aggregate base in maximum 6" lifts to 95% maximum dry density.

 New hot or warm mix asphalt will be placed in lifts (3" maximum) and each lift shall be compacted using a vibratory plate compactor or a static roller. Asphalt pavement depths shall match existing pavement depths but in no case shall be



less than the depth described below as determined by the presence of lane striping on the street.

- (a) For streets with lane striping, the minimum depth shall be 8 inches and consist of two 3 inch lifts of asphalt base mix and one 2 inch lift of asphalt surface mix. Asphalt surface mix shall conform to VDOT requirements for asphalt concrete, type SM-12.5D or Stone Matrix Asphalt (SMA) where SMA exists. Asphalt base mix shall conform to VDOT requirements for asphalt concrete, type BM-25.0.
- (b) For streets without lane striping, the minimum depth shall be 4 inches and consist of one 2-1/2" lift of asphalt base mix and one 1-1/2" lift of asphalt surface mix. Asphalt surface mix shall conform to VDOT requirements for asphalt concrete, type SM-9.5A or SM-9.5D. Asphalt base mix shall conform to VDOT requirements for asphalt concrete, type BM-25.0.

When it is necessary to use cold patch in an opening due to the unavailability of hot or warm mix material, the cold patch will be applied in one lift, approximately 2 inches thick. The restoration will not be considered complete until the cold patch is removed and replaced with hot or warm mix asphalt.

- 4) Patches will be approved based on their general appearance as well as their "rideability." Rideability is defined as a leveling tolerance to within one-quarter inch (1/4") at any point across the patch as it relates to the surrounding street surface.
- The repair shall be rectangular and saw cut in straight, uniform lines that are aligned with the street centerline. When edges of pavement have been undermined, pavement shall be removed to a neat line 12" beyond the undermined area. Any initial pavement repair with an area greater than 40 square feet may be non-rectangular, however, the repair shall be saw cut in straight, uniform lines. Any other deviation on patch shape shall be approved by the Inspector prior to the repair being made.



(c) <u>Final Restoration</u>:

- 1) In a street with lane striping,
 - a. any initial pavement repair with an area greater than 400 square feet which transversely covers more than one foot (1') of a lane shall require the entire lane width to be milled and repaved, for a distance of 10 feet from the edge of the initial pavement repair in both directions.
 - b. any initial pavement repair with an area greater than 100 square feet and equal to or less than 400 square feet may be milled and repaved or made seamless through the use of infrared or other approved technology. Should the repair fail within the warranty period, the affected area shall be milled and repaved.
 - c. any initial pavement repair with an area equal to or less than 100 square feet, milling and repaving are not required; however, the repair shall be made seamless through the use of infrared or other approved technology.
- 2) In a street without lane striping, milling and repaving are not required; however, the repair shall be made seamless through the use of infrared or other approved technology.
- 3) Efforts to make joints seamless will not be required until 90 days after the final restoration has been completed; although that effort may be made at any time during the 90-day period.
- 4) In all cases, the requirement to make the joint seamless through the use of infrared or other approved technology will be waived when the pavement condition index (PCI) of the affected street is rated as below:
 - (a) Arterial and Collector Street PCI of 100 or above
 - (b) Downtown/ CBD/ Industrial Street PCI of 95 or above
 - (c) Residential Street PCI of 85 or above

Pavement condition indices will be established by the Transportation Division through its pavement rating processes and will be made available to Permittees.



- 5) For linear excavations, the Permittee may elect to mill and pave, in which case the requirement to make the joint seamless will be waived.
- Milling depth shall be a minimum one and one-half inches (1½"). Repaying shall exactly match milling depth. Any manhole adjustments shall be the responsibility of the Permittee. Positive drainage and existing flow lines shall be maintained.
- The limit of final restoration may be adjusted by the Permit Administrator. Consideration will be given to the proximity of nearby paving joints. In cases where paving has occurred in the previous four years, the Permit Administrator may require the restoration to extend to the paving joint if within 10 feet of the required limits of restoration.

5.2 CONCRETE PAVEMENT.

- (a) Any Excavation in a concrete pavement shall require a slab replacement from the nearest transverse joint longitudinally and the entire width of the lane. Slab replacement in an alley shall extend the entire pavement width.
- (b) Once the compacted backfill has been placed, 1" dowel bars, a minimum of 15" long, shall be installed 7.5" into the existing concrete slabs. The bars shall be placed on 12" centers and grouted with an approved adhesive or grout. Welded wire fabric may be required. A "high early" strength (5,000-psi minimum strength within 7 days) concrete mix is required for concrete pavements and valley gutters. Place, finish, and protect new concrete with adequate protection during its curing period. Concrete is required to "set" within 4 hours of placement. Before the pavement is opened to traffic, joints shall be cleaned and properly sealed.

5.3 DECORATIVE PAVEMENT.

If decorative pavement is disturbed, the Permittee shall be responsible for repairing the pavement to match the original design in color and texture. The extent of decorative pavement restoration shall be determined by the Inspector.



5.4 TRAFFIC CONTROL DEVICES.

- (a) Signalized Intersections: The Permittee, or the Permittee's subcontractor, shall not cut into the pavement of a signalized intersection without contacting Miss Utility of Virginia in accordance with Virginia Code Sections 56-265.14, et. seq. Traffic Engineering will attempt to locate and mark buried loop detection devices. Any Permittee, or Permittee's subcontractor, that damages a loop detector marked within Miss Utility Specifications shall replace, repair, or pay for the replacement of the damaged loop detector within three (3) business days of such damage.
- (b) Pavement Markings: Lane striping or other painted and affixed delineators, which are removed or damaged, shall be replaced by the Permittee before restoration will be considered complete. Replace markings using like materials, or as approved by Traffic Engineering.

5.5 SIDEWALKS.

Damaged sidewalks shall be removed and replaced in full sections (nearest joint). Replacement sidewalk material shall match the existing sidewalk to the extent practicable except that all replacement sidewalk shall be a minimum of four (4) inches thick and shall be placed over a minimum of four (4) inches of VDOT No. 21A Aggregate compacted to at least 95% maximum dry density within 2 percentage points of optimum moisture (VTM-1) with the use of mechanical tampers or vibratory rollers. All concrete edges that are to be removed shall be saw cut and formed from construction joint to joint. A section's size will be determined by the adjacent sections or by the Inspector. Steel forms shall be used in all cases.

- (a) Concrete for sidewalks shall be a minimum of 3,000 psi concrete and shall include additives necessary to achieve high-early strength.
- (b) Any sections of sidewalk that have been undermined shall be cut out and replaced. Suitable backfill as described above shall be installed and compacted prior to replacement.
- (c) The Permittee, or the Permittee's subcontractors, shall not park any vehicles and/or equipment on City sidewalks. Any damage observed after the work has been completed



and that is attributable to the Excavation or performing the Excavation will be the Permittee's responsibility. The Permittee will be required to make the necessary repairs for any such damage.

5.6 CURB RAMPS FOR PEOPLE WITH MOBILITY IMPAIRMENTS.

Any work which requires the disturbance of the curb, and/or sidewalk, touching the back of the curb located within a street intersection return, shall be removed and replaced with a curb ramp, at the Permittee's sole expense. The ramp shall be constructed with detectable warning in accordance with current (Virginia Department of Transportation and City of Roanoke) standards and specifications. When the work disturbs an existing curb ramp, the ramp will be removed and replaced in its entirety and installed in accordance with current (Virginia Department of Transportation and City of Roanoke) standards and specifications.

5.7 CONCRETE DRIVEWAY ENTRANCES.

Driveway entrances shall not be "patched" following any work on or around such entrances. The entire apron shall be replaced to the nearest expansion joint. Entrances shall be constructed and repaired to current VDOT standards.

5.8 CURB AND GUTTER.

When curb and gutter are disturbed or damaged, they shall be replaced in full ten-foot (10') sections and match existing curb and gutter materials to the extent practicable. Match existing curb elevations and ensure a constant grade to provide positive drainage. Curb and gutter shall be installed over 6" of compacted crush stone base that extends 12" past the back of curb. Expansion material shall be used at all joints. If the work includes removal of a section which was finished with a control joint, the Permittee shall saw cut the joint prior to removing the existing section, or as directed by the Inspector.



5.9 HORIZONTAL DIRECTIONAL DRILLING.

Horizontal Directional Drilling (HDD) may be used within the Public Right of Way if preapproved by the Division. The following conditions will apply to HDD:

- (a) Horizontal Directional Drilling equipment operators shall be trained, preferably by the equipment manufacturer, in the safe and proper operation of the equipment. Written proof of proper training shall be furnished to the City's Inspector upon request. Failure to furnish training documentation could result in a Stop Work Order being issued. Any and all additional costs incurred by the Permittee, as result of the issuance of a "Stop Work Order," shall be the Permittee's responsibility.
- (b) For all underground utility construction, the Permittee shall thoroughly investigate the location of all known public, municipal, or any other utilities or other Facilities paralleling or crossing the proposed path of the proposed Facilities or construction area.
- (c) All Public Utility Facilities which are to be located underground shall, after the effective date of these Standards, be installed to a minimum depth of twenty-four (24) inches below the surface of the Public Right of Way.
- (d) The Permittee is encouraged to use observation pits (pot-holes) to verify the location of existing underground utility facilities.
- (e) HDD equipment shall have directional control of the boring tool and have an electronic boring tool location detection system. During operation the HDD equipment, the operator shall be able to determine the location of the boring tool both horizontally and vertically.
- (f) The Permittee or the Permittee's subcontractor shall be in direct charge and control of the HDD operation at all times.
- (g) The Inspector shall be notified 48 hours in advance of starting HDD operations. HDD operations shall be performed in the presence of an Inspector unless otherwise directed by the Division. The Work Location Sheet included as Attachment 4 shall be used for such notice.
- (h) Potholes in the pavement surface shall be repaired in accordance with the requirements for initial pavement repair. Should the patch dimensions exceed 12 inches by 12 inches,



final restoration will be required. If more than four (4) potholes are made in the pavement surface for any single drilling location, final restoration will be required.

5.10 MONUMENTS.

Any monument or property corner that is disturbed shall be reset by a licensed land surveyor at the sole cost of the Permittee performing the Work. Documentation from the surveyor shall be provided to the Division.

5.11 LANDSCAPING.

- (a) In grass areas, place topsoil to a minimum depth of 4 inches. Topsoil shall be Rockydale manufactured topsoil or approved equal. Rake areas to remove all root clumps, stones, and debris 1 inch or greater in size. True up all depressions and edges. Scarify subsoil to a depth of 2 inches where topsoil is to be placed. Establish a smooth grade ready to receive seed and sod. Finish grade must be acceptable to the Inspector. Sow seed at rate of 7 lbs. per 1,000 square feet using a seeding machine. Do not sow under windy conditions. Distribute seed evenly. Do not lap seed into shrub and groundcover beds. Rake seed lightly into top 1/8 inch of soil, roll lightly, apply mulch and water with fine spray. Watering of all planted material is the responsibility of the Permittee. Seedbed shall be kept moist for 2 3 weeks to allow for germination. In the performance of this work Permittee shall be responsible to keep sidewalks, roads, and other paving clean of debris, mud and dust at all times.
- (b) The seed mix used shall be selected based on the specific use of the area being restored. If the use cannot be determined, the Applicant shall consult the City's Landscape Coordinator.
 - (i) Standard Quality/Standard Visibility Area A "Blue Tag" certified seed blend consisting of 3-4 varieties of turf-type tall fescue cultivars that are currently on Virginia Tech's annual "Turfgrass Variety Recommendations" listing as approved by the Virginia Crop Improvement Association (VCIA) such as WolfPack, Tarheel, Tomahawk, Apache, etc.
 - (ii) Low Maintenance Right of Way and Slope Areas A "Blue Tag" certified seed hard fescue that is glyphosate (Round-Up) tolerant.



(c) When Excavation conflicts with a tree or its root system, Permittee shall be responsible for coordinating work with the City's Urban Forester.

5.12 BACKFILLING OUTSIDE THE PAVEMENT.

Soil excavated from the site or other appropriate material may be used as backfill in areas outside the pavement provided it is deemed to be suitable by the Inspector. Unsuitable material shall be removed from the site and replaced with material approved for use as set forth in Section 5.11 or local material approved by the Inspector. Compaction methods for local material used outside the pavement shall be approved by the Inspector.

6.0 VIOLATIONS.

The Transportation Division has the authority to enforce the regulations and standards specified in the Right of Way Excavation & Restoration Standards to prevent violations thereof. Upon the Transportation Division's determination that a Person or Permittee has violated any provision of these Standards, the standard details and specifications, or notices of the Division; any term, condition, or limitation of any permit; or is subject to any outstanding fees, deposits, or other charges, the Transportation Division shall serve notice on such Person or Permittee to promptly abate the violation. Any Person or Permittee whom the Transportation Division determines to be responsible for violating the provisions contained in these Standards may be subject to any or all of the enforcement mechanisms as hereinafter specified.

6.1 STOP WORK ORDER, PERMIT MODIFICATION, AND PERMIT REVOCATION.

- (a) When the Transportation Division has determined that a Person or Permittee has violated the provisions of these Standards or that an Excavation poses a hazardous situation or constitutes a public nuisance, public emergency, or other threat to the public health, safety, or welfare, the Transportation Division is authorized to issue a Stop Work Order, to impose new conditions upon a permit, or to suspend or revoke a permit by notifying the Person or Permittee of such action in a written, electronic, or facsimile communication.
- (b) The Transportation Division's determination as to any of the above actions shall be final, unless such Permittee or subcontractor objects in writing to such action within five (5) calendar days after receipt of notice of such action. After receipt of such notice of



objection, the Director of Public Works will meet with or receive evidence from such objecting Permittee or subcontractor and make a final decision as to the action taken by the Transportation Division. In addition, the Permittee or subcontractor may be subject to those enforcement actions set forth in these Standards, including Sections 6.3, 6.4, and 7.0, the City Code, or by law.

6.2 SUBSURFACE, CURBING, SIDEWALK, OR PAVEMENT FAILURES WARRANTY.

In the event that subsurface material, curbing, sidewalk, or pavement over or immediately adjacent to any Excavation should become depressed, broken, or fail in any way or should landscaping restoration efforts fail to provide 90 percent converage within two (2) years after the Excavation has been completed and designated as such by the City, and that is attributable to the Excavation or performing the Excavation, the Permittee and the Permittee's subcontractor who did such work in the Right of Way shall make the necessary repairs as directed by the Division. The Transportation Division shall notify the Permittee or subcontractor of the condition, location, and the required remedy, and such Permittee or subcontractor shall repair or restore, or cause to be repaired or restored, such condition to the satisfaction of the Transportation Division within thirty (30) calendar days of the notification. If a failure poses a hazardous situation, the Permittee or subcontractor shall restore such condition within seventy-two (72) hours of the notification. The Transportation Division may extend the time for such party to repair or to restore the affected Public Right of Way. All warranty repairs shall comply with Section 5.0 of these Standards. All repairs to areas damaged as a result of performing the work covered under the permit shall be covered by the warranty. All such repair or restoration work shall be subject to an additional warranty period of two (2) years from the date of completion of such work. Failure of any such work will be repaired or restored as set forth above or as otherwise provided in these Standards.

6. 3 REPAIR BY THE DIVISION.

(a) In the event that any Permittee or subcontractor fails, neglects, or refuses to repair or restore any condition pursuant to the Transportation Division's notice as set forth in Section 6.2 of these Standards, the Transportation Division may repair or restore, or cause to be repaired or restored, such condition in such manner as the Transportation Division deems expedient and appropriate. The Permittee and/or subcontractor shall



compensate the Division for any costs associated with administration, construction, consultants, equipment, inspection, notification, remediation, repair, restoration, or any other actual costs incurred by the City that were made necessary by reason of the repair or restoration undertaken by the Division. The Transportation Division's determination as to the cost of the repair or restoration performed shall be final, unless such Permittee or subcontractor objects in writing to such cost within 10 calendar days after receipt of notice of the cost. After receipt of such notice of objection, the Director of Public Works will meet with or receive evidence from such objecting Permittee or subcontractor and make a final decision as to the cost for such work. In addition, the Permittee or subcontractor may be subject to those enforcement actions set forth in these Standards, including Sections 6.4 and 7.0, the City Code, or by law.

(b) Subject to the limitations set forth in Sections 6.2 and 7.0 of these Standards, repair or restoration by the Division in accordance with this Section shall not relieve the Person(s), Permittee(s) or subcontractor doing the work from liability for future pavement or other failures at the site of the repair or restoration.

6.4 PENALTIES AND FEES.

- (a) Violations of these Standards constitute a violation of Sections 30-48 and 30-49 of the Code of the City of Roanoke (1979), as amended. Pursuant to Section 30-1 of the City Code, such violation would be a Class 3 misdemeanor. Each day on which a violation occurs or continues shall be deemed a separate and distinct violation.
- (b) Any Person or Permittee who fails to comply with these Standards will not be allowed to work or to continue to work in the Right of Way and will be subject to such requirements as may be imposed by the Division to ensure compliance with these Standards. Such requirements may include, but are not limited to, suspension of other permits held by the Person or Permittee, Stop Work Orders, payment by the Person or Permittee of any costs incurred by the City to correct such failure to comply with these Standards, and denial of permit requests until violations are corrected and the Person or Permittee can establish that they will properly comply with these Standards for all permits they might request.



- (c) Permit(s) reinstatement and/or issuance will be done once any violations of these Standards have ended and been corrected and once any requirements imposed by the Division have been completed.
- (d) If work is started in the Right of Way without a permit, the fee for obtaining a permit for such work will be an increased fee as set forth in the City's Fee Compendium.

7.0 EMERGENCY REMEDIATION BY THE DIVISION.

- (a) If, in the judgment of the Transportation Division, the site of an Excavation is considered hazardous or if it constitutes a public nuisance, public emergency, or other imminent threat to the public health, safety, or welfare that requires immediate action, the Transportation Division shall order the condition remedied by a written, electronic, or facsimile communication to the Permittee or subcontractor responsible for doing the work.
- (b) If the Person, Permittee or subcontractor doing the work is inaccessible or fails, neglects, or refuses to take immediate action to remedy the condition as specified in such communication, the Transportation Division may remedy the condition or cause the condition to be remedied in such manner as the Transportation Division deems expedient and appropriate. The Person, Permittee and/or subcontractor doing the work shall compensate the Division for any costs associated with administration, construction, consultants, equipment, inspection, notification, remediation, repair, restoration, or any other actual costs incurred by the Division or other agencies, boards, commissions, or Divisions of the City that were made necessary by reason of the emergency remediation undertaken by the Division. The procedures set forth in Section 6.3 of these Standards shall apply for assessment and payment of costs to this Section.
- (c) Subject to the provisions set forth in Section 6.2 of these Standards, remediation by the Division in accordance with this Section shall not relieve the Person, Permittee, and/or subcontractor doing the work from liability for future pavement or other failures at the site of the remediation, repair, or restoration.



8.0 ENVIRONMENTAL ISSUES

- (a) The Person or Permittee is responsible for pursuing and obtaining any and all environmental permits which may be required to pursue the proposed activity prior to any work beginning within the Right of Way.
- (b) In the event the Person or Permittee encounters hazardous materials, hazardous wastes, or underground storage tanks within the Right of Way in the pursuit of its activities, the Person or Permittee is responsible for ceasing all work within the site, except such activities as may be required by law to secure the site, and notifying the Transportation Division, the City's Office of Environmental Management, and other responsible groups, i.e. local fire department, Virginia Department of Environmental Quality, etc.
- (c) If no release, as defined by the United States Environmental Protection Agency (EPA), has occurred, the Person or Permittee will be advised if it may continue with its activities or if such activities must be terminated. If the Person or Permittee is advised it may continue with its activities, such Person or Permittee may elect to proceed with its activities or terminate its activities. If an election is made to proceed, the Person or Permittee is responsible for coordinating and completing all remedial/removal activities required in order to properly complete such activities within the Right of Way. If an election is made to terminate its activities, the Person or Permittee will be responsible for securing the site, cooperating with the City to turn the site over to the City and/or responsible party who may proceed with appropriate remedial and/or removal activities, and for pavement restoration, or its costs, as such pavement restoration may be directed by the City.
- (d) If a release, as defined by the EPA, has occurred, the Person or Permittee is responsible for any such release arising out of such Person's or Permittee's activities or actions in the Right of Way and for any required remedial/removal activities that may be required as a result of such release.
- (e) In the event the Person or Permittee encounters cultural, archaeological, or paleontological artifacts, graves, and/or rare minerals, within the Right of Way in the pursuit of its activities, the Person or Permittee shall act immediately to suspend work at the site of the discovery and notify the Division. The Person or Permittee is responsible for notifying the proper state authority, if any, charged with the responsibility for



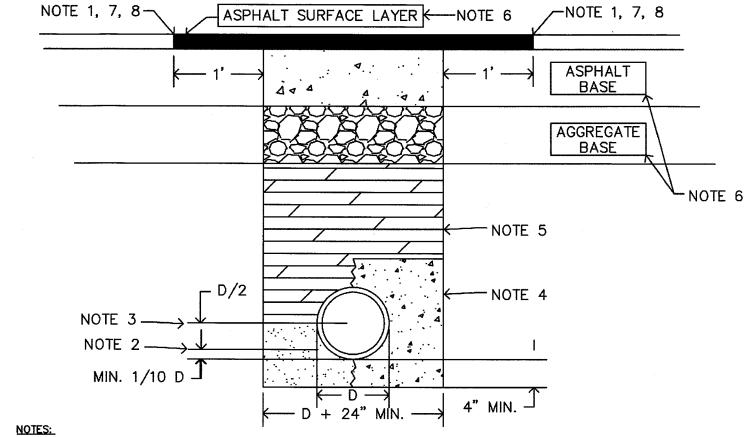
investigating and evaluating such finds. Prior to continuing with the proposed activities within the Right of Way, the Person or Permittee will meet all necessary requirements for resolving any conflicts and shall provide evidence of such compliance to the Division.

END OF STANDARDS

ATTACHMENT 1

UTILITY TRENCH REPAIR DETAIL

	•	



- 1. ALL PAVEMENTS SHALL BE SAW CUT WITH NEAT, UNIFORM LINES PRIOR TO EXCAVATION.
- 2. PIPE BEDDING MATERIAL SHALL BE CRUSHER RUN (VDOT NO. 25 OR 26) OR OPEN GRADED AGGREGATE (VDOT NO. 57, 68, 7, OR 8). ALTERNATE MATERIAL MUST BE APPROVED BY THE TRANSPORTATION DIVISION INSPECTOR.
- 3. MAXIMUM DEPTH OF PIPE BEDDING MATERIAL IF USING OPEN GRADED AGGREGATE FOR BEDDING.
- 4. OPTIONAL CONCRETE ENCASEMENT FOR POWER OR COMMUNICATION CONDUIT. PROVIDE A MINIMUM OF 4" CONCRETE COVER FROM ALL SIDES OF CONDUIT.
- 5. BACKFILL MATERIAL SHALL BE VDOT NO. 21A AGGREGATE OR FLOWABLE FILL.
 - A. AGGREGATE SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 6", AND COMPACTED TO AT LEAST 95% MAXIMUM DRY DENSITY WITHIN 2 PERCENTAGE POINTS OF OPTIMUM MOISTURE (VTM-1) WITH THE USE OF MECHANICAL TAMPERS OR VIBRATORY ROLLERS. WATER COMPACTION IS NOT PERMITTED. LOCAL MATERIAL CLASSIFIED AS TYPE I SELECT MATERIAL MAY BE USED AS BACKFILL UPON PRIOR APPROVAL BY THE TRANSPORTATION DIVISION. SEE STANDARDS FOR ADDITIONAL INFORMATION ON DENSITY AND TESTING REQUIREMENTS.
 - B. FLOWABLE FILL, IF USED, SHALL MEET THE REQUIREMENTS OF VDOT'S SPECIAL PROVISION FOR FLOWABLE BACKFILL. THE MATERIAL SHALL BE PLANT—CERTIFIED TO PROVIDE A 28-DAY COMPRESSIVE STRENGTH BETWEEN 30 AND 200 PSI. SEE STANDARDS FOR ADDITIONAL INFORMATION ON DENSITY AND TESTING REQUIREMENTS
- 6. RESTORATION OF ASPHALT PAVEMENT SHALL CONFORM TO SECTION 5.1 OF THE STANDARDS.
- 7. THE REPAIR SHALL BE RECTANGULAR AND SAW CUT IN STRAIGHT, UNIFORM LINES THAT ARE ALIGNED WITH THE STREET CENTERLINE. WHEN EDGES OF PAVEMENT HAVE BEEN UNDERMINED, PAVEMENT SHALL BE REMOVED TO A NEAT LINE 12" BEYOND THE UNDERMINED AREA. ANY INITIAL PAVEMENT REPAIR WITH AN AREA GREATER THAN 40 SQUARE FEET MAY BE NON-RECTANGULAR, HOWEVER, THE REPAIR SHALL BE SAW CUT IN STRAIGHT, UNIFORM LINES. ANY OTHER DEVIATION ON PATCH SHAPE MUST BE APPROVED BY THE INSPECTOR PRIOR TO THE REPAIR BEING MADE. THE FINISHED PATCH SURFACE SHALL BE WITHIN 1/4 INCH AT ANY POINT ACROSS THE PATCH AS IT RELATES TO THE SURROUNDING STREET SURFACE.
- 8.A FULL COVERAGE TACK COAT IS REQUIRED ON ALL SURFACES THAT WILL CONTACT THE NEW SURFACE LAYER.

ATTACHMENT 2 RIGHT-OF-WAY EXCAVATION PERMIT APPLICATION

RIGHT-OF-WAY EXCAVATION PERMIT APPLICATION

Submit 2 copies of application, site plan, cost estimate, and (if required) traffic control plan

48 Hour Advance Notice is required to perform work in the right of way. Please Fax to 540-853-1270 prior to starting work.



Permit #	
Issue Date:	· · · · · · · · · · · · · · · · · · ·
Issued for	_calendar days
Inspection F	ee: \$
Bond Amou	nt: \$

I.	Application Date:	Requested Duration: _	calendar days
	Worksite Address:	Quad:	Tax Map #:
	Permittee Name:	Utility Owner Nar	ne:
	Permittee Address:		
	(Street) Construction Contact Person:	(City) Fax#_	(State) (Zip) Phone #
II.	Description of Work for Street Improvem	nents: If part of a Site Plan, Plan No.:	
III.	Description of Work for Utility:	Utility Type:	
A.			
В.	Method of Construction:	<u> </u>	****
	☐ Open Cut ☐ Direct Bury ☐ Horizo	ontal Directional Drilling (HDD) 🔲 Other:	
C.	Limits of Initial Repair- please list cut siz Asphalt Pavement:(I) x(w) Sidewalk:(I) x(w) Grass: Other:	acrosslanes (l) x(w) Curb:(ft.) N	No. of Concrete Entrances:
D.	Limits of Final Pavement Restoration (m. [] Pavement Markings [] No Pavement [] Street on Paving Program Candidate Lis Estimated Limits of mill and overlay: Final Limits subject to adjustment by right-o	ill and overlay) – refer to Paving Program Markings st: Final Restoration not required _(I) x(w) Adjustmanhole ri	
IV.	Estimated Cost of Work: \$	(attach estimate worksheet)	
V.	SPECIAL INSTRUCTIONS AND/OR PROV	ISIONS – OFFICE USE ONLY:	

RIGHT-OF-WAY EXCAVATION PERMIT A	APPLICATION - PAGE 2 0F 2
Application Date: Permit #:	
shall show all requested work on the application sidewalk, driveways, closest cross street, city tree edge of pavement. All work shall be done in according	accompanied by a scaled site plan of proposed work. Site plan including city right of way line, edge of pavement, curb & gutter es and north arrow. Existing utility lines and reference them to the ordance with this application or as amended by this office. Detailed. Please submit application and site plan in duplicate (2 copies)
Public Right of Way and is liable for all consequence Public Right of Way. Permittee is responsible subcontractors. Permittee agrees and binds itseemployees (hereafter collectively referred to in the causes of action, damages or any liability, including or damage of any type to any persons or proper resulting from, any act or omission of Permittee of not limited to: (a) Permittee's use of the public versionstruction, erection, installation, operation, multiplic Right of Way; or (c) the failure, refusal or not permittee by or under its permit. The issuant	wholly responsible for the quality of the Excavation performed in the uences of any such Excavation and any Facilities installed in the for any acts or omissions of Permittee's employees, agents, on elf to indemnify, keep and hold the City, its officers, agents, and his paragraph as City) free and harmless from any and all claims any reasonable attorney's fees and costs, on account of any injury (including City property) growing out of, or directly or indirectly or Permittee's employees, agents, or subcontractors, including but ways or other areas of the City; (b) the acquisition, construction naintenance, repair or extension of Permittee's facilities within the neglect of Permittee to perform any duty imposed upon or assumed account of any permit, inspection, repair, or suggestion, approval or ivision shall not excuse the Permittee from such responsibility or
The applicant further agrees to accept full respo edition of the Manual on Uniform Traffic Control	nsibility to provide work zone safety in accordance with the lates Devices and the Virginia Work Area Protection Manual.
any Excavation should become depressed, broke been completed and designated as such by the Excavation, the Permittee and the Permittee's sul necessary repairs as directed by the Division. The of the condition, location, and the required remediates to be repaired or restored, such condition calendar days of the notification. If a failure porestore such condition within seventy-two (72) hot time for such party to repair or to restore the affection 5.0 of the City of Roanoke Right of Way Bareas damaged as a result of performing the worsuch repair or restoration work shall be subject to	rial, curbing, sidewalk, or pavement over or immediately adjacent to en, or fail in any way within two (2) years after the Excavation has City, and that is attributable to the Excavation or performing the becontractor who did such work in the Right of Way shall make the e Transportation Division shall notify the Permittee or subcontractor dy, and such Permittee or subcontractor shall repair or restore, or to the satisfaction of the Transportation Division within thirty (30 sees a hazardous situation, the Permittee or subcontractor shall urs of the notification. The Transportation Division may extend the exted Public Right of Way. All warranty repairs shall comply with Excavation and Restoration Standards (Standards.) All repairs to rk covered under the permit shall be covered by the warranty. All to an additional warranty period of two (2) years from the date of ork will be repaired or restored as set forth above or as otherwise
obtained to perform the work, that all work wil	ate, that proper permission from the utility owner has beer Il be done in accordance with the current edition of the City o ration Standards, and that the owner and the undersigned, i ds.
	Printed Name of Permittee or Authorized Agent
Date	Signature of Permittee or Authorized Agent (original signature required for approval)

Date

Approved: ______City of Roanoke Authorized Agent

ATTACHMENT 3 EXCAVATION PERMIT BOND

EXCAVATION PERMIT BOND

KNOW ALL MEN BY THESE PRESENTS:

That			,
com	plete legal name and address of	entity requesting Per	mit
(hereinafter called Princip	oal),		
and			
comp	plete legal name and address of S	Surety	
office inunto the City of Roano Municipal Building, 21 (hereinafter called	, as Surety (hereinaften), as Surety (hereinaften), a municipal 5 Church Avenue, S.W. Obligee or City) Dollars (\$	er called Surety), corporation, c/ , Roanoke, Vir , in the) for the payn	(state), with its home are held and firmly bound to the City Manager, 364 ginia 24011, as Obligee full amount of ment of which sum well and
-	-	•	selves, our heirs, executors, v these presents to the terms

WHEREAS, Principal will or has obtained an Excavation Permit(s) through the City of Roanoke's Transportation Division that will allow the Principal to make an excavation(s) and perform work within the City's Public Right of Way as provided for in such Permit(s) and in accordance with the City of Roanoke Right of Way Excavation and Restoration Standards (Standards). All the terms and conditions of such Permit(s) and Standards are hereby incorporated herein by reference and made a part hereof as if fully set forth herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that if the Principal shall well and truly perform and fully carry out the work authorized by such Excavation Permit(s), including, but not limited to repair and/or restoration of street surfaces, sidewalks, and other City property, in strict conformity with such Permit(s) and Standards and the Principal shall defend all suits and hold Obligee harmless against any and all claims or damages of any type as required by such Permit(s) and Standards, then this obligation shall be void; otherwise, this Excavation Permit Bond shall remain in full force and effect, and the Surety will comply with such Permit(s), and is subject to the following conditions:

1. Any alteration which may be made to the terms of such Permit(s) and Standards including, without limitation, any waiver by the Obligee of any particular breach or term of such Permit(s) and/or Standards or any extension of time of performance of any term or condition of such Permit(s) and/or Standards or any other forbearance of any nature whatsoever on the part of either the Obligee or the Principal to the other shall not in any way release the Principal and the Surety, or either of them, their heirs, executors, administrators, successors, or assigns from their liability hereunder, and notice of such alteration, extension, or forbearance is hereby expressly waived by the Surety.

- 2. The Surety hereby agrees to and hereby submits itself to a court of competent jurisdiction in the City of Roanoke, Virginia, and further agrees that this Bond is controlled by the laws of the Commonwealth of Virginia and that all claims, disputes and other matters shall be decided only by such court according to the laws of the Commonwealth of Virginia and not elsewhere.
- 3. The Surety agrees that it will not change, alter, or cancel this Excavation Permit Bond for a period of two years from the date of such Bond or any renewal date of such Bond.
- 4. Notwithstanding any other provisions of this Bond, the City may institute a claim and/or suit under this Bond within the longer period of time of the following: (i) completion of the Work covered by this Bond, including the expiration of all warranties and guarantees for such Work; (ii) discovery of the defect or breach of warranty; or (iii) as may otherwise be allowed by law.

SIGNED and SEALED this day	of, 20
WITNESS:	Complete legal name of Principal
Signature Typed name of Witness	By
Typed hame of withess	Printed name of Person and Title (Seal of Principal)
WITNESS: Signature Typed name of Witness	Complete Typed Legal Name of Surety By Attorney-in-Fact
Typed name of Williams	Printed name of Person (Seal of Surety)
Approved as to Form	Approved by Public Works Department
City Attorney	Director of Public Works
(NOTE: Attorneys-in-fact affix seal and atta	ach original or certified copy of current power of attorney)

ATTACHMENT 4 WORK LOCATION SHEET

WORK LOCATION SHEET



48 Hour Advance Notice is Required to Perform Work in the Right of Way. Please Fax to 540-853-1270 prior to starting work.

Transportation Division Inspector's Office

Contractor:

Date:

Company:
Division
Contact Person:

Phone Number(s):

								_		 	
e Only	Inspection	Final									
For Inspector Use Only	dsul	First									
For Ins		Date					,			-	
	Type of Description	iybe oi nepair									
	Pavement	Type									
	Site A City	Sile Addless									
MANDATORY		Permit Number									